

INDUSTRY CAPABILITY REPORT



FRESH FRUIT & VEGETABLE

Prepared by: Sri Lanka Export Development Board (EDB) December 2019



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1. The Industry

Agriculture is the most common livelihood of Sri Lankans, and almost eighty (80) different varieties of fruits and vegetables are grown in Sri Lanka's in varied agro-climatic areas.

While identifying the opportunities in international and local market, the present development programs are targeted to establish small farm cluster companies merged with exporters or marketing enterprises to expand productivity, promote convenient products, increase sustainable farm income, etc.

2. Production

Sri Lanka produces around 2,962,000 metric tons of vegetables and around 1,019,000 metric tons of fruits in year 2017. (*Source - Department of Agriculture*) The majority of the population involved in agriculture is small producers or home garden growers whose individual extent of land does not exceed a hectare.

While identifying the opportunities in international and local market, the present development programmes are targeted to establish small farm cluster companies linked to exporters or marketing enterprises to expand productivity, promote convenient products, increase sustainable farm income, etc. Private sector involvement in commercial cultivation too has been encouraged in the country.

2.1 Key products and Varieties

Broadly, the climatically cool and salubrious condition in the hill country are ideal for temperate crops such as carrot, leeks, cabbage, Chinese cabbage, cauliflower, salad leaves, beet, bean, bell pepper, salad cucumber, tomatoes, cherry tomatoes, sukini, strawberries while the low country and dry wet areas are suitable for a variety of tropical fruits and vegetables ranging from green chili, red onion, pumpkin, bitter gourd, melon, sweet and sour banana types, cavendish banana, queen pineapple, papaya, mango, lemon and gherkins etc.

Certain indigenous yams such as innala (Lecranthus) and kiri ala (Xanthasoma sagittifolium), underwater stems of kohila (Lasia spinosa) and nelum ala (Nymphea lotus) and fruits and pods of perennial crops such as bread fruit, young jak fruit and drumsticks (murunga) are foreign exchange earners for the country.

3. Supply Chain

- Small farms and home gardens
- Commercial cultivation
- Cluster organizations / Commercial farms
- Agro zone project and Integrated agriculture model projects
- Village / Central collecting centres
- Provincial wholesale markets / Economic centre

4. Specialties associated with products

There are superior flavors compared to certain products exported from the region. Secondly the vicinity of Sri Lanka is untouched by the chemicals, Fertilizers and pesticides. There are couples of belts where the produced natural vegetation is organic in nature by default.

It is the same with Sri Lankan pineapple, mangosteen, ripe jak fruit, avocado, rambutan, star fruit and anoda (sour sup) which has a special flavor it, Tropical produce of Sri Lanka origin such as pineapple, rambutan, mangosteen, passion fruits etc. are very popular among the nations in the world due to their unique characteristics such as flavor, aroma and colour.

5. Quality Standards

Sri Lanka is adjusting well to the stringent ISO 22000 series and to the health & safety regulations stipulated by the European Community. Farmers are constantly educated to practice Good Agricultural Practices (GAP) at the nurseries and some farms are certified under the GLOBAL GAP certification. The Processing/ Manufacturing facilities owned by the export companies comply with local standards (SLSI) and also with International Quality Standards such as ISO, HACCP, and EU Standards. Traceability throughout the supply chain is monitored in order to guarantee a safe product to the consumers.

6. Technology

Improved technologies on crop cultivation especially cultivation under poly tunnels, application of drip irrigation systems, optimum input applications, pest and disease control, postharvest management, quality packaging and improved transportation methods are practiced specially for export marketing.

YEAR	PLANTAIN		CASHEW		LIMES		MANGOES		ORANGES	
	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.
	Hec.	000 Bchs.	Hec.	000 Nuts	Hec.	'000 Nuts	Hec.	'000 Nuts	Hec.	'000 Nuts
2014	56216	44177	21490	6378	12138	221328	29744	382665	6725	38593
2015	53246	56998	20102	1825624	11394	215832	27786	424063	7847	45280
2016	47958	54395	18683	1915183	10967	257230	32207	432755	6333	47647
2017	49,307	62,549	21,014	9,158	10,798	247,655	28,272	433,523	6,891	46,990

7. Extent and Production of Major Fruit Crops

YEAR	PAPAW		PASSION FRUIT		PINE APPLE		RAMBUTAN		AVOCADO	
	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.
	Hec.	'000 Nuts	Hec.	'000 Nuts	Hec.	'000 Nuts	Hect.	'000 No.	Hect.	'000 No.
2014	6943	62448	509	6350	5410	38582				
2015	6666	61345	642	8954	5161	43909	3923	352351	2469	54528
2016	5913	49661	508	14841	4775	40339	4939	240125	2588	62953
2017	6,975	57,479	470	7,313	4,783	42,229	5,899	409,686	2,923	30,606

Source: Department of Census and Statistics.

7.1 Varieties of Fruits Developed by the Department of Agriculture

Crop	Variety
Avocado	Simmonds, Fuerte, TowerII, Booth Pollock Purple hybrid
Papaya	Ratna
Mango	Malwana, Kartha colomban, Willard & Vellai Colomban,
	Peterpassand
Rambutan	Malwana No. 1
Banana	Nadee
Mandarin	Madhu

Source: Department of Agriculture

7.2 Main Fruits Nuts Exports in Sri Lanka (US\$ 000)

Description	tion 2015 2016 2017			2018	3			
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Other Fruits	6,899,186 Kg	10,134	6,319,622 Kg	9,299	7,582,321 Kg	13,389	8,592,532 Kg	14,994
Bananas	19,025,024 Kg	15,859	20,699,461 Kg	16,332	14,964,962 Kg	16,843	17,036,266 Kg	14,934
Melons &	2,781,598 Kg	1,933	3,372,076 Kg	2,538	5,344,684 Kg	3,645	6,210,135 Kg	3,738
Papayas								
Pineapples	1,720,912 Kg	5,060	1,451,949 Kg	3,961	1,205,824 Kg	5,026	795,362 Kg	2,770
Tamarind	202,588 Kg	82	484,987 Kg	180	883,008 Kg	376	4,375,831 Kg	2,294
Cashew Nuts	131,667 Kg	1,565	84,463 Kg	975	85,312 Kg	1,208	98,302 Kg	1,153
Lemons	747,126 Kg	756	137,904 Kg	127	598,211 Kg	646	424,046 Kg	753
Goraka	1,338,509 Kg	4,286	865,507 Kg	2,326	874,603 Kg	1,947	213,999 Kg	353
(Garzenia)								
Other Nuts	117,824 Kg	1,990	4,194 Kg	7	9,434 Kg	38	31,793 Kg	136
Total :	32,964,434	41,665	33,420,163	35,746	31,548,359	43,116	37,778,266	41,125

7.3 Supply of Fruits

		Domesti	c Supply (of Fruite (1000 MT)	
	2013	2014	2015	2016	2017	Average
Total Domestic Supply	983	1,161	1,257	1,207	1,096	1,141
Local Production	947	1,137	1,205	1,162	1,019	1,094
Imports	66	62	92	75	103	80
	Per	CapitaFr	uit Supply	per year (kg)	
Total Fruits	37	43	46	44	41	42
Plantains	21	27	30	28	26	26
pineapple	3	2	2	2	2	2
Apple	1	1	1	1	2	1
Orange and Mandarins	1	1	2	1	2	1
Other Fruits	10	10	10	10	9	10
	Proc	luction of	selected fi	ruits (1000	,MT)	
Plantains	642	827	912	870	751	800
Pineapple	59	55	44	44	42	49
Orange and Mandarins	7	12	9	10	9	9

7.4 Supply of Vegetables & Pulses

	Dome	stic Sup	ply of Veg	etables and	Pulses (10)00,MT)				
	2013	2014	2015	2016	2017	Average				
Supply of Vegetable	3,429	3,252	3,250	3,411	3,268	3,322				
Production of Vegetables	3,160	3,022	3,001	3,072	2,962	2,043				
Imports	279	241	261	349	334	293				
Supply of Pulses	272	226	290	262	298	270				
Production of Pulses	56	39	44	39	47	45				
Imports	230	217	261	232	267	241				
Per capita Vegetables and Pulses per year (kg)										
Vegetable	146	138	136	141	134	139				
Pulses	13	11	14	11	14	13				

(Source: Department of Census and Statistics)

8. Varieties of Vegetables Bred by the Department of Agriculture

Сгор	Variety
Luffa	LA33
Cucumber	LY53
Bitter gourd	MC 43
Snake gourd	TA-2
Pumpkin	ANK
Tomato	KWR, T-146, T245
Eggplant	Vihara Hybrid
Capsicum	SM-164, Padagoda
Radish	CA-8
Okra	Beeralu, Bola
Wing bean	Haritha, MI5, SL44, SLS 40, UPS 122

Source: Department of Agriculture

9. Geographical Distribution Across the Country

Main crops grown in each district

No.	District	Сгор
01.	Kurunegala	Cucumber (10%), Orange (11%), lime (12%), Mangoes (19%), Banana(19%), Pineapple (40%)
02.	Monaragala	Brinjals (10%), Cucumber (10%), Ash Pumpkin (29%), Red Pumpkin (15%), Ash Plantain (20%), Oranges (13%), Limes (37%) Plantain (13%) Papaw (10%)
03.	Anuradhapura	Luffa(10%), Okra (12%) Brinjals ((15%), Ash Pumpkin (29%), Red Pumpkin (27%)
04.	Badulla	Tomato (24%), Cabbage (33%), Carrot (32%), Knolkhol (33%), Beetroot (11%), Raddish (16%), Beans (46%), Leeks (10%), Capsicum (18%) Brinjals (10%), Oranges (20%)
05.	Rathnapura	Beans (10&), banana (16%), Passion Fruit (23%)
06.	Kandy	Tomato (14%), Cabbage (10%), Beans (13%)
07.	Nuwara Eliya	Tomato (17%), Cabbage (38%), Carrot (60%), Knolkhol (51%), Beetroot (50%), Raddish (30%), Beans (14%), Leeks (86%), Capsicum (18%)
08.	Gampaha	Pineapples (35%)
09.	Hambantota	Luffa (19%), Bitter Guard (16%), Snake Gourd (15%), Cucumber (11%), Ash Plantian (10%). Papaw (12%)
10.	Puttalam	Beetroot (19%), Capsicum (15%)
11.	Ampara	Cucumber (17%), Red Pumpkin (10%)
12.	Kaluthara	Passion Fruit (34%)

Source: Department of Agriculture

Description	2016		201	7	2018		
	Quantity	Value	Quantity	Value	Quantity	Value	
Other Vegetables	7,849,543 Kg	12,991	10,582,864 Kg	17,992	9,027,708 Kg	16,352	
Manioc	5,164,241 Kg	3,264	4,470,003 Kg	2,760		2,951	
Mushroom	545,030 Kg	1,418	696,930 Kg	1,719	834,217 Kg	2,117	
Chilies	465,166 Kg	1,284	419,899 Kg	1,373	416,788 Kg	1,457	
Gherkins	1,225,760 Kg	891	1,061,070 Kg	714	1,608,039 Kg	1,226	
Kiri Ala	250,198 Kg	329	278,436 Kg	248	303,805 Kg	231	
Onions	20,353 Kg	56	34,786 Kg	105	65,189 Kg	118	
Potatoes	1,830 Kg	5	55,851 Kg	44	91,289 Kg	79	
Sweat Potatoes	29,812 Kg	31	48,779 Kg	44	25,305 Kg	45	
Carrots			1,032 Kg	7	102,476 Kg	34	
Tomato	600 Kg	8	63,964 Kg	202	13,769 Kg	14	
Garlic	55,363 Kg	100	8,757 Kg	27	934 Kg	3	
Cabbage	17 Kg		2 Kg		567 Kg	2	
Total :	15,607,913	20,378	17,722,373	25,236	17,526,220	24,628	

10. Main Vegetable Exports In Sri Lanka (US\$ 000)

Source: Sri Lanka Export Development Board

The export revenue has been increased over the last few years due to high demand in the world, and the value of export of fresh and processed fruits and vegetables stud at US & 33 Million in year 2012 and has been increase up to US 69 Million in year 2014. The fruits and vegetable exports account for about 0.3% percent of total exports of the country. Fruit & Vegetable sector is expected to achieve the export target of US \$ 212 Million in year 2020.

11. Export Market for Fruit & Vegetable

Processed food and Fruits & vegetables sectors have been identified as a sector with high potential in the world due to the increasing demand from end consumers and for value added products in the world market. Sri Lanka exports both fresh and processed fruits and vegetables and 65 per cent of the fresh products are targeted to the Middle East and the Maldivan market. Almost 90 per cent of the processed products are exported to the European market. United Arab Emirates, Saudi Arabia, Qatar, Maldives, India, U.K. Kuwait, Germany, Pakistan are the top fruit & vegetable importing countries from Sri Lanka.

12. Top 10 Fruit &	Vegetable Exporting	Countries from Sri	Lanka (US \$ 'Mn)
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Country	2015	2016	2017	2018	% Avg.
	Value	Value	Value	Value	Growth
United Arab Emirates	16	14	15	14	-3.37
Maldives	9	10	12	11	8.09
Qatar	6	5	7	9	17.56
Saudi Arabia	6	6	9	8	13.98
Switzerland	2	2	3	2	12.29
United Kingdom	3	2	2	2	-9.09
Pakistan				2	90.86
France	2	2	2	2	1.63
Germany	3	2	2	2	-4.55

Kuwait	1	1	2	2	12.48
Others	15	12	13	10	-10.79
Total :	63	56	68	66	3.13

Source: Sri Lanka Export Development Board

13. Key players in the sector (Top 15 Exporters)

- DOLE LANKA PVT LTD
- Y A S LANKA PVT LTD
- C R EXPORTS PVT LTD
- EASTERN & ALLIED AGENCIES LTD
- EXPOLANKA PVT LTD
- GLOBAL TRADING & MARKETING PVT LTD
- C B L NATURAL FOODS PVT LTD
- VEGILAND EXPORTERS PVT LTD
- H J S CONDIMENTS PVT LTD
- SUBASH EXPORTS PVT LTD
- NIDRO SUPPLY PVT LTD
- CONSOLIDATED BUSINESS SYSTEMS PT LD
- PULSES SPLITTING & PROCE INDUST P L
- ALOY EXPO PVT LTD
- TARGET AGRICULTURE PVT LTD

Source: Sri Lanka Export Development Board

14. Government Policy and Support Available in the Sector

Ministry of Agriculture has introduced wide range of assistance and development programs for this sector since many years. The EDB also has initiated a number assistance programmes to assist export oriented agriculture project at regional level. The program includes awareness programs on different varieties of horticultural crops, soil testing, crop selection, crop protection, poly house and post harvest technologies including pack houses and quality certifications, Interrelated Agriculture Projects, GMP centres etc. Premier quality institutions like SLSI, SGS and others also runs awareness programs on Globalgap and other Market access requirements of developed world.

The government has also initiated couple of support programs for integrated farming basically meant for a group of farmers with an intent to do contract farming. The scheme also offers cash subsidy/grants to the beneficiaries.

15. R & D and Product Development Facilities Available

Research and Development facilities are available in Sri Lanka to support the industry and here are large numbers of Institutions involved in agricultural researches. A couple of prominent institutions at regional levels are also established to support the sector such as Department of Agriculture in Peradeniys, Gannoruwa Agrarian Research Centre –Kundasale and Angunakolapelessa Agrarian Research Centre – Matara are the few important institutions.

16. Infrastructure/Logistics Required/ Available for the Sector

A well-established road-rail network and high ways constantly developed to meet the demand of the modern age, facilitates production, for both local consumption and export trade. Within a few hours of motoring, produce can be delivered to the port. Modern communication systems are well established in the Island. Sri Lanka is well served by major international airlines while the national carrier, Sri Lankan Air Lines, itself operates regular and charter services to major destinations in the world, for passengers and commercial cargo. Even private air charter services are available exclusively for cargo. The cargo village at the Colombo International Airport is equipped with cold room facilities and many other modern equipment. The dry zone, with an intricate network of irrigation facilities, catering especially to the fruit and vegetable sector.

17. Availability of Technology and Skilled Labour

Improved techniques on crop cultivation, input application, post harvest management, packaging, transport etc. are practiced specially for export marketing

Organic production is also coming up well and large number of players getting certified under farmer's certification schemes for becoming export capable in organic produce of fruits and vegetables.

18. Strengths and Weaknesses of the Sector

Strengths

- Diverse Climatic conditions
- Skilled and effective labor
- Unique Characteristics in selected fruit varieties such as Pineapple, Passion Fruit, Rambutan etc)
- Technology
- Traceability
- Quality Standards (SLSI, HACCP, GAP, GMP, EU Standards for fresh fruits & vegetables, Organic, ISO 22000)

Weaknesses

- Fragmented production by small and marginal farmers
- No continuity in supply
- Small land holding
- Lack of awareness about quality standards
- Lack of infrastructure
- Lack of quality supply
- High cost of production

- High Cost of labour, Packaging, Transport, Air freight, Electricity ect.
- Inadequate quality seed materials
- High cost of investments for new technology
- Inadequate researches
- High interest rates
- Labour issues

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